

IN THE CLAIMS:

This listing of claims replaces all prior versions and listings of claims in the application:

1. (currently amended) A heart valve device for connection to a first mass comprising:

a gasket body comprising an annular wall defining a gasket radius around a longitudinal axis central to the gasket body, the wall defining first and second edges, the gasket body further comprising a sewing ring including a skirt extending radially outwardly from the first edge and a complementary attachment device in the sewing ring, and
an elongate attachment device comprising one or more digitations, detents, or pawls,
wherein the complementary attachment device comprises an inner attachment radius and an outer attachment radius,
wherein the gasket radius, the inner attachment radius and the outer attachment radius are measured from the longitudinal axis, and wherein the outer attachment radius is greater than the gasket radius, and
wherein the complementary attachment device [[element]] comprises a receptacle, the receptacle comprising a ratchet tooth for self-ratchetedly engaging [[a detent]] the one or more digitations, detents, or pawls on [[an]] the elongate attachment device received therethrough.
2. (previously amended) The device of Claim 1, wherein the inner attachment radius is greater than the gasket radius.

3. (withdrawn) The device of Claim 1, wherein the inner attachment radius is substantially equal to the outer gasket radius.

4. (withdrawn) The device of Claim 1, wherein the inner attachment radius is less than the outer gasket radius.

5. (withdrawn) The device of Claim 4, wherein the inner attachment radius is greater than the inner gasket radius.

6-8. (canceled)

9. (original) The device of Claim 1, wherein the complementary attachment device is resilient.

10. (original) The device of Claim 1, wherein the complementary attachment device is deformable.

11-15. (canceled)

16. (original) The device of Claim 1, wherein the complementary attachment device comprises an internal obstacle.

17-20. (canceled)

21. (previously amended) The device of Claim 1, wherein the sewing ring comprises a fabric.

22-28. (canceled)

29. (currently amended) The device of Claim 1 [[24]], wherein the receptacle comprises a can.

30. (original) The device of Claim 29, wherein the can is deformable.

31. (original) The device of Claim 29, wherein the can is resilient.

32. (currently amended) A heart valve device for connection to a first mass comprising:

a gasket body comprising an annular wall defining a gasket radius around a longitudinal axis central to the gasket body, the wall defining first and second edges, the gasket body further comprising a sewing ring including a skirt extending radially outwardly from the first edge and a complementary attachment device, and

an elongate attachment device comprising a plurality of digitations, detents, or pawls,

wherein the complementary attachment device comprises an inner attachment radius and an outer attachment radius,

wherein the gasket radius, the inner attachment radius and the outer attachment radius are measured from the longitudinal axis, and wherein the outer attachment radius is greater than the gasket radius, and

wherein the complementary attachment device further [[element]] comprises a can and the can is fixedly attached to the gasket body, the can comprising a ratchet tooth for self-ratchetedly engaging the digitations, detents, or pawls on the elongate attachment device when the elongate attachment device is received through the can.

33. (canceled)

34. (original) The device of Claim 29, wherein the can comprises solid walls.

35. (withdrawn) The device of Claim 29, wherein the can comprises a wireframe.

36. (withdrawn) The device of Claim 29, wherein the can comprises a wrapped plate.

37. (currently amended) A heart valve device for connection to a first mass comprising:

a gasket body comprising an annular wall defining a gasket radius around a longitudinal axis central to the gasket body, the wall defining first and second edges, the gasket body further

comprising a sewing ring including a skirt extending radially outwardly from the first edge and a complementary attachment device, and

an elongate attachment device comprising a plurality of digitations, detents, or pawls,

wherein the complementary attachment device comprises an inner attachment radius and an outer attachment radius,

wherein the gasket radius, the inner attachment radius and the outer attachment radius are measured from the longitudinal axis, and wherein the outer attachment radius is greater than the gasket radius, and

wherein the complementary attachment device further [[element]] comprises a can and the can comprises a plurality of ratchet [[tooth]] teeth for self-ratchetedly engaging the digitations, detents, or pawls on the elongate attachment device when the elongate attachment device is received through the can.

38. (canceled)

39. (canceled)

40. (canceled)

41. (original) The device of Claim 1, wherein the complementary attachment device is integral with the gasket body.

42. (withdrawn) The device of Claim 1, wherein the complementary attachment device comprises a first cam.

43. (withdrawn) The device of Claim 42, wherein the first cam is rotatably attached to the gasket body.

44. (withdrawn) The device of Claim 42, wherein the complementary attachment device comprises a second cam.

45. (canceled)

46. (withdrawn) The device of Claim 1, wherein the complementary attachment device further comprises a first fenestration.

47. (withdrawn) The device of Claim 46, wherein the complementary attachment device further comprises a first end, a second end, and a second fenestration between the first fenestration and the second end,

wherein the first fenestration is between the first end and the second end,
and wherein the complementary attachment device further comprises a first length between the first fenestration and the second fenestration.

48. (withdrawn) The device of Claim 47, further comprising an attachment device, wherein the device is configured for the attachment device to pass through the first fenestration.

49. (withdrawn) The device of Claim 48, wherein the device is configured for the attachment device to pass through the first length.

50. (withdrawn) The device of Claim 49, wherein the device is configured for the attachment device to pass through the second fenestration.

51. (original) The device of Claim 1, further comprising a mechanical valve attached to the gasket body.

52. (original) The device of Claim 1, further comprising a biological valve attached to the gasket body.

53. (original) The device of Claim 1, further comprising a leaflet attached to the gasket body.

54. (original) The device of Claim 1, further comprising an attachment device adapted to interact with the complementary attachment device.

55. (withdrawn) The device of Claim 54, wherein the attachment device is knotless.

56. (original) The device of Claim 54, wherein the attachment device comprises a suture.

57. (withdrawn) The device of Claim 54, wherein the attachment device comprises a snare.

58-63. (canceled)

64. (withdrawn) The device of Claim 54, wherein the attachment device comprises a digitation.

65-73. (canceled)

74. (currently amended) A heart valve device for connection to a first mass comprising:

a gasket body comprising an annular wall covered by fabric,

a leaflet attached to the gasket body,

an elongate attachment device comprising a plurality of digitations, detents, or pawls, and

a discrete receptacle attached to the gasket body for receiving [[an]] the elongate attachment device having one or more detents therethrough, the receptacle comprising teeth

elements comprising shelves and slopes for self-fixturingly ratcheting the attachment device through the receptacle.

75-95. (canceled)

96. (previously amended) A heart valve device for connection to a first mass, comprising:

an annular body comprising a wall defining a circumference;

a plurality of receptacles spaced apart around the circumference of the wall, each receptacle comprising an element defining a shelf and a slope; and

a plurality of elongate attachment devices receivable through the receptacles, each attachment device comprising a detent for self-fixturingly ratcheting through a respective receptacle;

wherein each attachment device comprises a plurality of detents spaced apart along a length of the attachment device.

97. (currently amended and withdrawn) The device of claim 96 [[92]], wherein each detent comprises an angled tab.

98. (currently amended and withdrawn) The device of claim 96 [[92]], further comprising a heart valve attachable to the annular body.

99. (withdrawn) The device of claim 98, wherein the heart valve comprises a leaflet gasket holding leaflets.

100. (withdrawn) The device of claim 98, wherein the heart valve comprises a biological valve.

101. (currently amended and withdrawn) The device of claim 96 [[92]], wherein the wherein the annular body is covered by fabric.

102. (currently amended and withdrawn) The device of claim 96 [[92]], wherein the annular body comprises a gasket body, the gasket body comprising an annular wall and a sewing ring attached to the annular wall.

103. (withdrawn) The device of claim 102, wherein the sewing ring comprises a skirt extending radially outwardly from an edge of the wall.

104. (withdrawn) The device of claim 103, wherein the skirt extends radially outwardly from a bottom edge of the wall.

105. (withdrawn) The device of claim 102, wherein the sewing ring comprises a flare extending radially outwardly from a bottom edge of the wall.

106. (currently amended and withdrawn) The device of claim 96 [[92]], wherein the receptacles comprise cans.

107. (currently amended and withdrawn) The device of claim 96 [[92]], wherein each receptacle comprises a plurality of shelves and slopes.

108-112. (canceled)

113. (previously amended) A heart valve assembly for implantation within a biological annulus, comprising:

a heart valve assembly comprising a crown carrying leaflets;
a gasket body comprising an annular wall and a sewing ring attached to the annular wall, the sewing ring comprising a skirt extending radially outwardly from an edge of the wall; and
a plurality of fixturing devices for attaching the gasket body to the biological annulus; and
a plurality of elongate attachment devices receivable through respective fixturing devices, wherein each attachment device comprises a plurality of detents spaced apart along a length of the attachment device.

114. (previously presented) The heart valve assembly of claim 113, wherein each detent comprises an angled tab.

115. (canceled)

116. (previously amended) A heart valve assembly for implantation within a biological annulus, comprising:

a heart valve assembly comprising a crown carrying leaflets;

a gasket body comprising an annular wall and a sewing ring attached to the annular wall, the sewing ring comprising a skirt extending radially outwardly from an edge of the wall;

a plurality of fixturing devices for attaching the gasket body to the biological annulus; and

a plurality of elongate attachment devices receivable through respective fixturing devices,

wherein each fixturing device comprises an element defining a shelf and a slope, the

fixturing devices configured for receiving respective elongate attachment devices therethrough, each attachment device comprising a detent for self-fixturingly ratcheting through a respective fixturing device; and

wherein each fixturing device comprises teeth elements for engaging the detent on the respective attachment device.

117. (previously amended) A heart valve assembly for implantation within a biological annulus, comprising:

a heart valve assembly comprising a crown carrying leaflets;

a gasket body comprising an annular wall and a sewing ring attached to the annular wall, the sewing ring comprising a skirt extending radially outwardly from an edge of the wall;

a plurality of fixturing devices for attaching the gasket body to the biological annulus; and

a plurality of elongate attachment devices receivable through respective fixturing devices,

wherein each fixturing device comprises an element defining a shelf and a slope, the fixturing devices configured for receiving respective elongate attachment devices therethrough, each attachment device comprising a detent for self-fixturingly ratcheting through a respective fixturing device; and

wherein each fixturing device comprises a plurality of shelves and slopes.

118. (previously presented) The heart valve assembly of claim 117, wherein each attachment device comprises a plurality of detents spaced apart along a length of the attachment device.

119. (new) A heart valve device for connection to a first mass, comprising:
an annular body comprising a wall defining a circumference;
a plurality of receptacles spaced apart around the circumference of the wall, each receptacle comprising an element defining a shelf and a slope; and
a plurality of elongate attachment devices receivable through the receptacles, each elongate attachment device comprising a plurality of digitations, detents, or pawls for self-fixturingly ratcheting through a respective receptacle.

120. (new) The device of claim 119, further comprising leaflets attached to the annular body.

121. (new) The device of claim 119, wherein the attachment devices comprise sutures.

122. (new) The device of claim 119, wherein the attachment devices comprise filaments.

123. (new) The device of claim 119, wherein the plurality of digitations, detents, or pawls are fixedly attached to the elongate attachment device.

124. (new) The device of claim 119, wherein the element comprises teeth internal to the receptacles.

125. (new) A heart valve assembly for implantation within a biological annulus, comprising:

a heart valve assembly comprising a crown carrying leaflets;

a gasket body comprising an annular wall and a sewing ring attached to the annular wall, the sewing ring comprising a skirt extending radially outwardly from an edge of the wall;

a plurality of fixturing devices on the gasket body for attaching the gasket body to the biological annulus; and

a plurality of elongate attachment devices receivable through respective fixturing devices, each elongate attachment device comprising a plurality of digitations, detents, or pawls for self-fixturingly ratcheting through a respective fixturing device.

126. (new) The heart valve assembly of claim 125, wherein the plurality of fixturing devices comprise a plurality of receptacles spaced apart around the circumference of the wall, each receptacle comprising an element defining a shelf and a slope, the receptacles configured for receiving respective elongate attachment devices therethrough.

127. (new) The heart valve assembly of claim 126, wherein the element comprises teeth internal to the receptacles.

128. (new) The heart valve assembly of claim 125, wherein the attachment devices comprise sutures.

129. (new) The heart valve assembly of claim 125, wherein the attachment devices comprise filaments.

130. (new) The heart valve assembly of claim 125, wherein the plurality of digitations, detents, or pawls are fixedly attached to the elongate attachment device.